

International Space University 14th Annual International Symposium
The Public Face of Space
Strasbourg, France
February 16 – 18, 2010

There's Enough Space for Everyone

Daniel M. Schumacher, Ph.D, Director
Office of Strategic Analysis and Communications (Mail Code CS01)
NASA George C. Marshall Space Flight Center
Marshall Space Flight Center, AL 358121
United States

Public Outreach, Promotion and Awareness of Space Activities: Presenting Space in the Media

Abstract

Only a few fortunate people have the opportunity to go into space and experience the wonders of our universe first-hand. But thanks to social media and virtual worlds, many unique opportunities exist for us to learn, explore and “experience” what’s out there from wherever we are. NASA and Marshall Space Flight Center (MSFC) are making this even easier to do.

From blogs to Twitter messages, from Facebook pages to Flickr Photo sites, NASA is leveraging social media to share never-before-seen footage and inside information on spaceflight, scientific discoveries and other space activities. Over the last year, Marshall has reached more than half-a-million viewers through its high-profile, real-time blogs. Through its *Watching a Launch* blog, visitors were invited to take the ‘virtual’ rides of their lives as they received a first-hand account of seeing a powerful shuttle launch - up close and personal. Through the *Shuttle Ferry Flight* blog, they got to experience the Shuttle Atlantis’ journey home to Kennedy Space Center as it rode “piggyback” on a modified Boeing 747 airplane.



This year, Marshall’s Flickr photo galleries have been visited over 700,000 times, Ares rocket videos have been viewed on iTunes, YouTube, TeacherTube and NASA Web sites more than 1.2 million times, and Marshall’s Facebook Page has over 2,800 “friends” who regularly follow NASA.

Social media tools have been a powerful way to reach and inspire the public, but NASA has also used these tools effectively to promote education and outreach. From events such as the Great Moonbuggy Race to the Student Launch Initiative, Marshall has used social networks to interest, excite and engage students.

This presentation shares some of NASA’s experiences on what has worked . . . and what hasn’t . . . and seeks to spread the message that through social media “there’s enough space for everyone.”

THERE'S ENOUGH
SPACE
FOR EVERYONE



Marshall Space Flight Center

Daniel Schumacher, Director, Office of Strategic Analysis & Communication
International Space University International Symposium
February 16-18, 2010

THE EVOLUTION OF SOCIAL MEDIA

- Mail replaced with e-mail, texts and IMs
- People want information fast, frequently, and from multiple sources



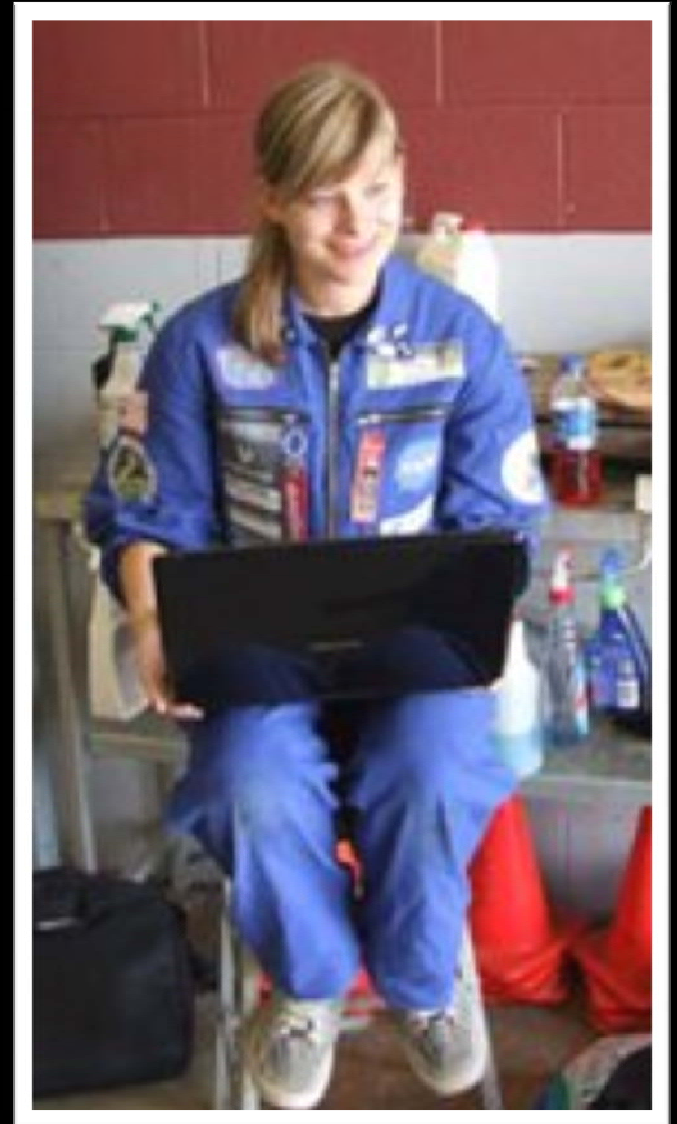
YOU TUBE VIDEO



*"There is much more water on the surface of the moon than anyone ever knew . . .
Today's discovery is something that NASA has been hoping for for years."*

THE IMPORTANCE OF SOCIAL MEDIA

- Innovative and inexpensive way for NASA to do outreach
- Not selling a specific product - delivering inspiration and education
- Helps position ourselves directly with interested audiences
- Helps reach more non-traditional audiences, such as the younger generation to promote interest in space
- Must maintain balance between social media and traditional news vehicles

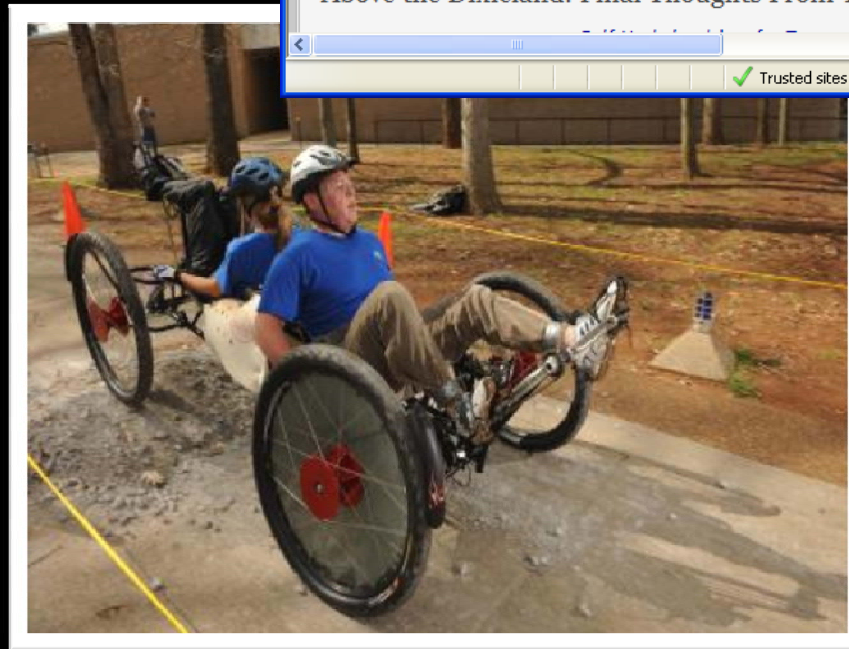
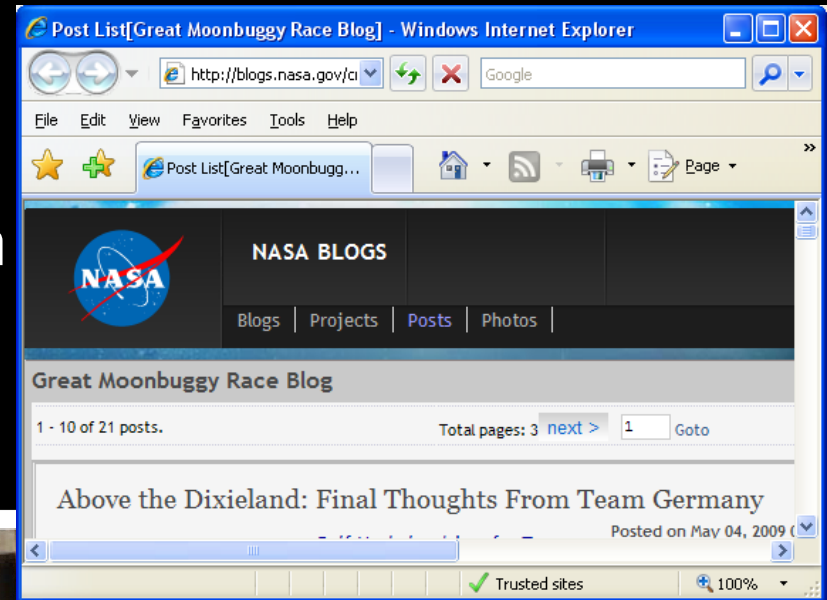


LEVERAGING SOCIAL MEDIA

- Can point people directly to images, video, other interesting information
- Offers opportunities to “push” information
- Allows us to create conversations and engage in dialogue with interested audiences

Examples:

- Great Moonbuggy Race
- Marshall Space Flight Center Blogs



SHUTTLE FERRY FLIGHT BLOG



"We're sitting on the C-9 here at Biggs and the **engines are humming**. We're a few minutes away from take off, heading to Kelly Field at Lackland, near San Antonio, Texas. We should get in there at about 9:00 local time. **Yep, Texas is really so big that we need two stops to get across it.**"

WATCHING A LAUNCH-BLOG

8:47 p.m. - Ten... nine... eight... we have a go for main engine start... five... four... three... two... one... booster ignition and liftoff of the Space Shuttle Discovery, lighting up the night-time sky as we continue building the International Space Station.

8:46 p.m. - T-31 seconds. The Ground Launch Sequencer is go for auto-sequence start, and Discovery's onboard launch sequencer is in control at this point.

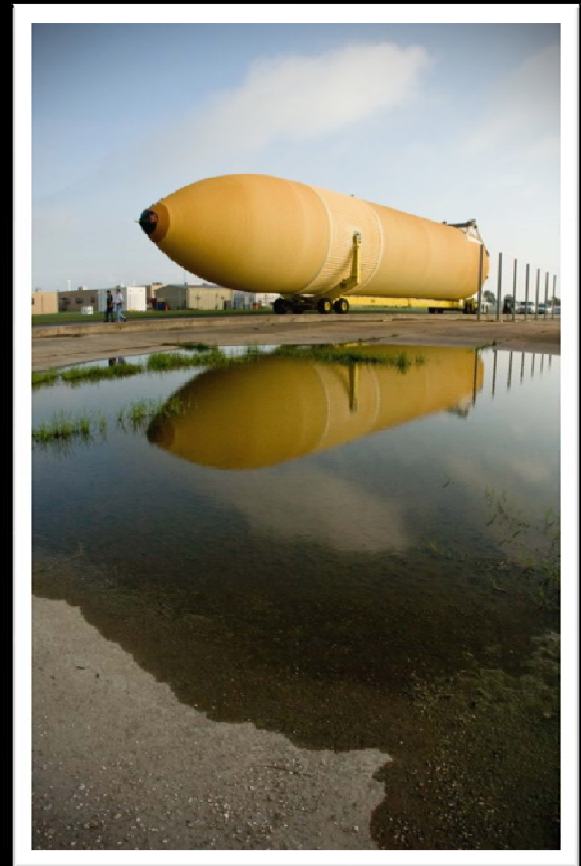
8:45 p.m. - T-2 minutes and counting. The crew has been advised to close and lock the visors on their launch and entry helmets and initiate the flow of oxygen into their helmets.



SAILING WITH NASA-BLOG



➤ Received almost
60,000 views



NASA MARSHALL FACEBOOK PAGE



Nasa Marshall [Add as Friend](#)

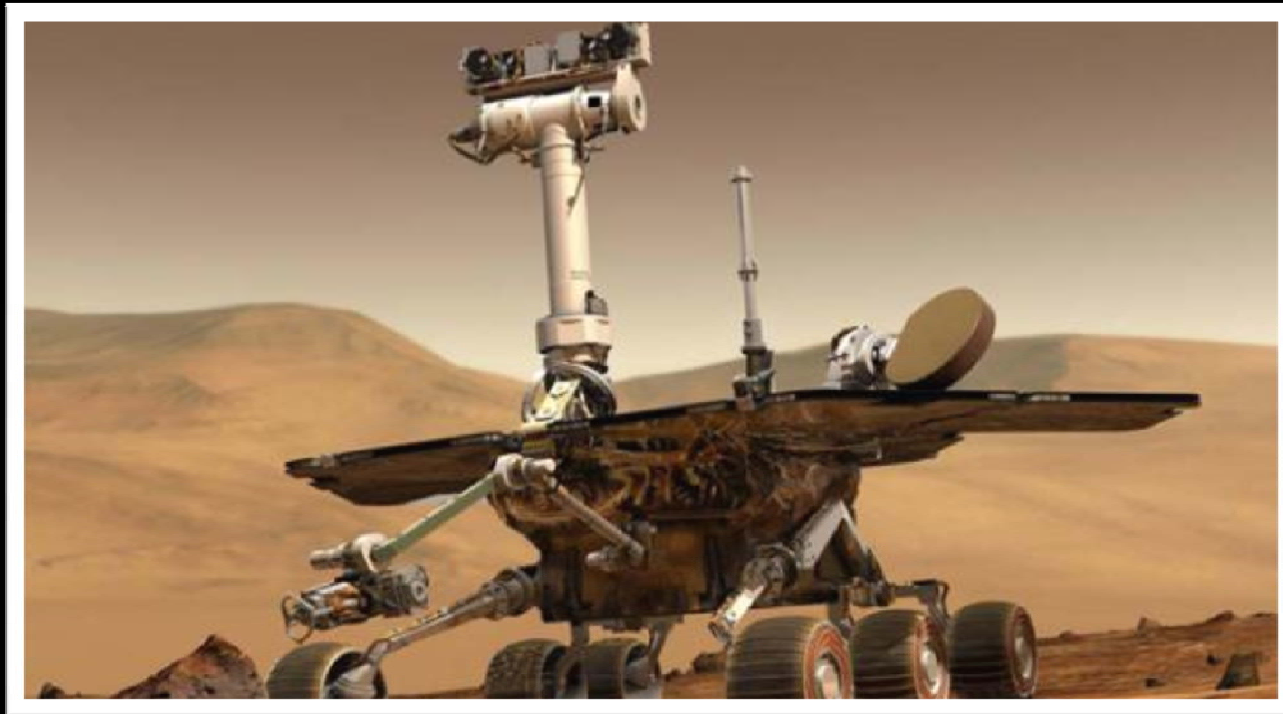


Facebook has
250 million viewers
worldwide



MSFC Facebook Page
Over 4400 Friends

MARS PHOENIX MISSION



Online
audience of
over
20,000
followers

Mars Rovers were given a “personality” through social media, which has allowed them to directly connect with thousands of people on a very personal level.

FLICKR PHOTO GALLERY

flickr

◀ Prev

Next ▶

Show info | Options | Help | Share



Providing unique views of our universe

ASTRONAUT MIKE MASSIMINO TWEETS



Mike Massimino From Orbit:

"Launch was awesome!! I am feeling great, working hard, and enjoying the magnificent views. The adventure of a lifetime has begun!"

NASA'S TWITTER PRESENCE



[@NASA](#)

[@MarsPhoenix](#)

[@hubble](#)

[@STS124](#)

[@STS125](#)

[@LCROSS_NASA](#)

[@LADEE_NASA](#)

[@LRO_NASA](#)

[@TESS_NASA](#)

[@NASAkepler](#)

[@NASA_EDGE](#)

[@NASA_MAAT](#)

[@NASAGLAST](#)

[@nasacolab](#)

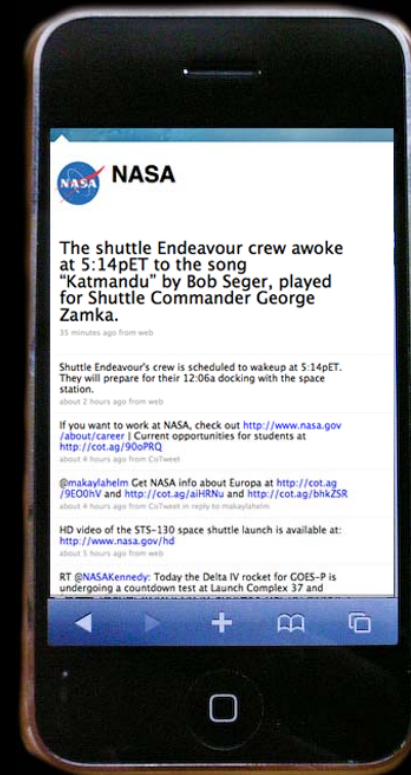
[@SSDiscovery](#)

[@SSAtlantis](#)

[@NASA_SDO_HMI](#)

[@NASA_SDO](#)

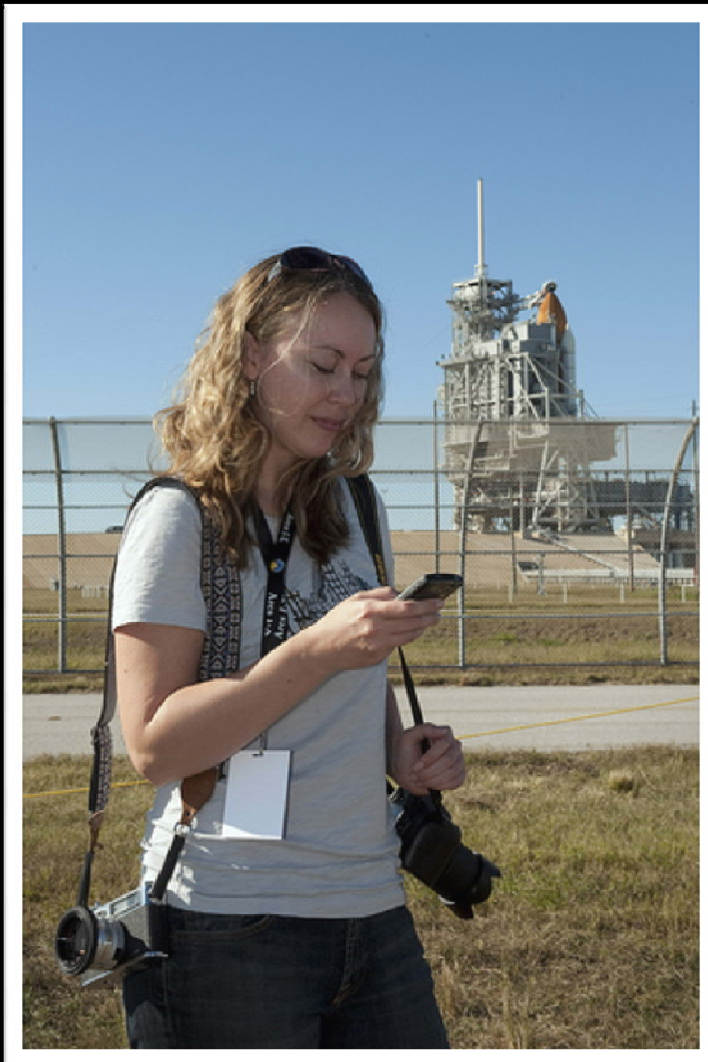
[@DESERT_RATS](#)



 NASA has over 50 twitter sites

www.nasa.gov/connect

LAUNCH TWEET-UPS



“NASA Pushes Social Media Experience to New Heights”



Over 100 launch “tweeters” had more than 100,000 followers.

ENSURING SOCIAL MEDIA SUCCESS

- Write well and creatively
- Have a compelling story
- Share new, innovative, and interesting things
- Always provide fresh information or a fresh viewpoint
- Ensure credibility of the “owner” of the social media tool/message
- Make commitment of time and effort to provide frequent updates
- Make a commitment to interact with followers
- Ensure accessibility to your social media vehicles

The *“Connect and Collaborate with NASA”* page, provides the public with quick connections to NASA’s social media pages in one central location.

www.nasa.gov/connect



<http://www.nasa.gov/connect>

International Space University 14th Annual International Symposium
The Public Face of Space
Strasbourg, France
February 16 – 18, 2010

There's Enough Space for Everyone

Daniel M. Schumacher, Ph.D, Director

Office of Strategic Analysis and Communications, Marshall Space Flight Center

Public Outreach, Promotion and Awareness of Space Activities: Presenting Space in the Media

Intro – Chart 1

- Hello, I'm honored to be here today. I'm Daniel Schumacher and I lead the communications function at Marshall Space Flight Center in Huntsville, Alabama, one of NASA's 10 field centers across the United States.
- Today, I want to present you ways that NASA and Marshall Space Flight Center are leveraging social media to share unique footage and inside information on human and robotic spaceflight, scientific discoveries and other space activities.
- We use all types of social media at NASA, from Twitter messages to Facebook pages and Flickr Photo sites. NASA even has a new I-Phone application that allows you to access our Web sites.
- I will share some of our experiences on how we've used these tools to inspire and engage the public, and how we will continue to leverage social media to ensure ***"there's enough space for everyone."***

Trends in reaching the public and the evolution of social media – Chart 2

- As you all know, over time, trends in how we communicate have slowly changed.
- Journalism and print publications have in many cases taken a back seat to online tools and social media.
- Media and public engagement is changing also.
- The days of snail mail have been replaced with e-mail, text messaging and IMs and there is an expectation for "instant everything." And these are the old technologies.
- Now, communications are even shorter and more frequent, and response times are generally quicker.

- People want information quickly and often from several sources.
- “140 characters” means something today it didn’t two years ago.
- Social media has evolved to meet this need for many people.
- As Google changed the Internet, social media has changed how many people choose to interact, and therefore, how we must interact with the public, at least a rapidly growing segment of the public.

YouTube - Chart 3

- Let’s talk about **YouTube** for a second. This tool offers a couple of good examples of just how explosive social media can be:
- You may have seen the video “The Evolution of Dance” on YouTube, which shows a guy dancing in funny ways to different types of music.
- Even though this video is 6 minutes long, it has received over 136 million views on YouTube - and that doesn’t include the other Web sites it’s posted on.
- That’s amazing when you consider that the most recent American Super Bowl held in February in the United States had a record 106 million viewers and the 30 second commercial spots during this sports event often cost millions of dollars.
- A vehicle like YouTube can give you well over 100 million views for a cost that’s basically negligible. It’s not money that gives the results, it’s the creative nature of the tool. So, it’s just a great idea to leverage this.
- This is the #1 Most Viewed Video on YouTube and the #3 most discussed video on YouTube.
- It’s amazing to me how interested everyone has been in this, especially considering its length and people’s attention spans, but it’s because people relate to it.
- Because the dances in the video span the generations, it takes each viewer, no matter their age, back to a period in their life that they remember fondly.
- More recently, you’ve likely heard of Susan Boyle. She’s a lady who sang on “Britain’s Got Talent” who viewers didn’t expect to sing very well.
- But, her voice and performance blew everyone away and shortly after the show her performance was published on YouTube internationally, not just in the U.K.

- Now, the original clip from the show has received close to 87 million hits and a newer hi-def version that's been posted has received over 37 million hits. And, by the way, she's now a recording artist.
- NASA has also been able to leverage the popularity of YouTube.
- For example, Ares rocket videos have been viewed on iTunes, YouTube, TeacherTube and NASA Web sites more than 1.2 million times.
- ReelNASA, which is like a subchannel on YouTube, has received almost 600,000 channel views, over 3.7 million total upload views, and has over 11,000 subscribers.
- So you can see how this is an effective vehicle for NASA to reach out to the public.
- I want to share with you one quick video from YouTube that shows how a traditional news clip can end up online and be seen over and over again. Social media really extends the shelf life of traditional media outlets also.

The importance of social media – Chart 4

- With the obvious explosiveness of social media, it can be an important tool for NASA, and for other government agencies, as well.
- It is a new, innovative and inexpensive way for NASA to do outreach.
- This is significant since a government agency is not like a corporation; we have no advertising budget.
- We also have very specific government restrictions on marketing because we are funded by tax payer dollars.
- And, we're unique in what we do because we are not selling a specific product. We are delivering outreach, inspiration and education, with a goal of creating public interest for space exploration, and for creating a STEM pipeline to encourage future interest in the subjects of science, technology, engineering and math.
- So, it's critical for us to find unique and innovative ways to reach target audiences with our messages.
- Social media offers a unique way to position ourselves directly with the audiences that are most interested in hearing our story, such as space enthusiasts, the space industry and our employees.

- But, it also provides the benefits of reaching more non-traditional audiences – particularly the younger generation, who might not be as interested in space.
- Again, this is increasingly important to us as we seek to promote STEM interest in the younger generation. This is a goal of our NASA administration and also of our President.
- So, we recognize the opportunities that social media presents to reach lots of different audiences.
- That being said, we are still feeling our way through how best use social media.
- NASA, as an agency, really started using social media in the mid 2000's. It wasn't until 2008 that we really began to leverage social media at our center.
- We don't have a lot of specific guidance on how to use social media at NASA, but we have decided that we don't "break" news through social media.
- However, when we do break news it typically hits social media channels right away and spreads very quickly.
- One thing we have recognized at our center is the need to use social media in conjunction with more traditional media, such as press releases to reach newspapers - a reprocessing of the same material so to speak.
- This is still necessary, since a big demographic interested in hearing what NASA does are an older generation, who may not be adept at or even interested in social media.
- So there is a balance to be kept there in what tools to use.
- Now, I want to get into some of the specific things we've done at NASA and specifically at our center to reach the public. Of course, the Agency leads social media efforts, and we follow suit from a center perspective, based on what are appropriate channels, and to the extent that technology allows.

Leveraging social media to reach the public – Chart 5

- Social media has given us the opportunity to point people directly to images, video, and other information about different space topics.
- It's allowed us to "push" communications, rather than just waiting for people to seek it out.
- More importantly, it has allowed us to create conversations and engage in dialogue with people who are interested in what we do - and that interest is considerable.

- The more you can get people engaged in discussion and talking about what you do, the more you create public interest.
- So, two-way communication with the public is a very important benefit to social media.
- One example of how we've used social media effectively for two-way communication is our blogs.
- As part of our education outreach efforts, for example, our center has leveraged social media to promote the Great Moonbuggy Race, and give people an inside view of what happens during this event.
- This race is an annual competition for high school and college teams who are challenged to build a moonbuggy and race it on a simulated moon surface.
- In 2009, NASA's helped the racers share their excitement with friends, family and space enthusiasts online through Facebook, Twitter and a new "Buggy Blog" which allowed the student racers to carry on ongoing dialogue with the viewers.
- This is just one of many blogs NASA has initiated. Over the last year, at our center alone, we hosted seven blogs, which received over 1.2 million views and over 850 viewer comments.
- This shows that viewers are engaged in the blog conversations.
- Let me talk about a few more of our blogs that we specifically initiated at Marshall Space Flight Center.

Shuttle Ferry Flight Blog – Chart 6

- This blog was an innovative idea to take something relatively mundane and make it a part of people's lives.
- Participants got to experience the Shuttle Atlantis' journey home to Kennedy Space Center, riding "piggyback" on a modified Boeing 747 airplane.
- The blogger took people through the entire process, sharing his first-hand stories about how weather impacts them and is a key decision factor in the route they take, describing each stop the plane made for refueling, and shared how the public in each city received them in each town they stopped.
- In talking about how the blogs allow us to engage in dialogue with our audiences, a good example is how several bloggers made comments about why weather is such a factor.

- Viewers asked why the orbiter can't fly in the rain since it's not a problem if the orbiter gets rained on when sitting on the launch pad. We were able to answer this question, helping the audience to gain greater understanding.
- Our blogger's response was that the rain hits the orbiter's tiles a lot harder when we're flying over 300 mph than it does at the pad. At those speeds the rain would be like a shotgun blast to the tiles. (Have you ever held your hand outside your car window when you're driving through a rainstorm?)
- So, with extra insights like this, people were very engaged with the blog.
- Some of the comments people made about the blog include:
 - "If anyone was to follow a shuttle mission from beginning to end, STS-125's was the one program to be a part of . . . NASA did exactly that with video and pictures and this wonderful blog recording Atlantis's journey back to KSC from Edwards. Thanks for the ride."
 - "Thanks so much for this fascinating blog! It keeps us space-geeks entertained and informed and helps the country to better understand our space program! "
 - "Enjoying tagging along with you Dan! Very interesting to get an inside look of how the shuttle gets home. You can really appreciate the logistics and planning that go into moving such a national asset. Awesome!"
- This blog was one of our most popular and received almost 100,000 views.

Watching a Launch Blog - Chart 7

- In this blog, visitors were invited to take the 'virtual' rides of their lives as they received a first-hand account of seeing a powerful shuttle launch - up close and personal.
- Literally, a blogger posted updates minute by minute on the launch activity, including the countdown, throughout the launch.
- Many viewers watched the launch on TV or the internet while they received blog updates.
- Some of the comments people made about the blog include:
 - "I feel like I am there! GREAT blog"

- “Wow! I wish I could have been there. My little girl watched her first launch today online, and I just want to thank everyone that made this possible. I still cry my eyes out every time!!! God Bless the crew, the mission, and NASA!!!”
- “Thank you for bringing this to us. Your words make the images much more intense.”
- For those people who get to experience what we do, you can hear from their comments that there is a lot of emotion. That’s what social media allows us to do – to connect with people in a meaningful way.

Sailing with NASA Blog - Chart 8

- The Sailing with NASA blog helped participants experience first-hand the external tank ferry to Kennedy Space Center.
- Now the external tank is the largest part of the Shuttle that contains liquid hydrogen and oxygen fuel.
- These tanks are over 150 feet long and weigh over 60,000 lbs, not filled up, so you can imagine it really is a feat to move this thing.
- A NASA public affairs officer travelled on board the Pegasus and Liberty Star ships to give viewers insight into NASA's maritime operations and hear first-hand what life on board the vessels is like on these 1,800 mile round trips from New Orleans to Kennedy Space Center at Cape Canaveral.
- The blogger sent updates through the NASA portal several times a day with personal experiences, images and video. This blog received almost 60,000 views.
- Shortly after this blog, I had the privilege of talking to a group of people who loop the U.S. using inter-coastal waterways in various style boats. I was sharing with them what we do at NASA and at our center.
- The blog reminded me of something that NASA does which relates to the interests of this boating group, and I was able to share with them how the ferry operation works and how we blogged about it.
- The audience appreciated the connection and several people commented that if they are in the part of the ocean where the ferry route occurs, they will be looking for it.
- Again, this shows how something NASA does connects with people.

Facebook - Chart 9

- Another popular social media tool for us at Marshall Space Flight Center, specifically, is Facebook.
- Facebook is huge. More than 250 million people around the world are now actively using Facebook and almost half of them are using Facebook every day.
- This includes people in every continent - even Antarctica. Marshall even has our own Facebook Page, which has over 4,400 “friends”.
- And, kind of a spin-off of Facebook, this spring, NASA’s Goddard Space Flight Center will debut an internal social network for its employees, “Spacebook.”
- The site will mimic Facebook and feature individuals’ profiles, expertise and personal interests.
- Of course, at Marshall, we also use social media tools to reach our employees, such as Twitter, Yammer and a Center Director’s Blog online, where our center leader posts video messages and answers employee questions.
- I just wanted to mention that, but, I’m not going to focus on internal today.
- And now, I want to talk more about some of the social media efforts that the agency or other centers have spearheaded.

Mars Phoenix Mission – Personalized Rovers - Chart 10

- You may have heard the buzz about the NASA Mars Phoenix Mission which started the Rover twitter phenomenon.
- Since launching in 2003 and landing on the surface of Mars in 2004, the rover, named Phoenix was given a “personality” through social media, and directly connected with thousands of people on a very personal level.
- What makes this particularly engaging is the “rovers” stream of regular first-person updates about life as a spacecraft on Mars.
- I’ll share with you an example of the first tweets sent by the Phoenix Rover as it approached landing on the surface of Mars. Remember these tweets have to be 140 characters or less, so they did a great job of keeping it interesting.
 - *Atmospheric entry has started. Time to get REALLY nervous. Now I’m in the “seven minutes of terror.”*

- *Peak heating will hit in 40 seconds. The heat and energy generated during atmospheric entry would be enough to power 280,000 homes.*
- *Parachute must open next. My signal still getting to Earth which is AWESOME!*
- *Parachute opening is scariest part for the team.*
- *Parachute is open!!!!*
- *Come on rocketssssss!!!!*
- *I've landed!!!!!!!!!!!!*
- *Cheers! Tears!! I'm here!*
- Phoenix has been extremely popular with almost 50,000 followers. Now, the rovers Spirit and Opportunity "tweet" as well, and have over 20,000 followers.
- An example of one of their recent tweets was:
 - *"I know it LOOKS easy, but you try following instructions sent from 182 million miles away!"*
- Since landing on Mars, the Mars rovers been interviewed by the media, have answered questions from individuals all over the world, and have managed to cut through the day-to-day noise and inform those otherwise too busy to pay attention to "just another NASA mission."
- @MarsPhoenix is the most popular application of Twitter for NASA.
- Now, the Mars Exploration Rovers have new life on the likes of "Second Life," "YouTube," online forums like "Unmannedspaceflight.com," and on "Facebook."

Flickr Photo Gallery - Chart 11

- NASA has also leveraged photo Web sites and another social media tool, Flickr, to post literally thousands of Mars rover images and share them with viewers all over the world, bringing the thrill of the red planet to a more far-reaching audience.
- NASA's Flickr photo galleries have been very popular for many of our programs.
- We have posted photos for the rockets we build, science programs, and educational outreach.
- Some of the really big Flickr sites are the ones that show pictures from the Chandra and Hubble space telescopes.

- Marshall's Flickr photo galleries alone received over 1.4 million photo views and hosts over 4,800 "friends."
- That doesn't include the agency-wide effort. We also received almost 10,000 positive comments and favorites votes on our Flickr images in 2009.

Shuttle Launch Twitter - Mike Massimino - Chart 12

- Mike Massimino was the first NASA astronaut to "use" Twitter in space, giving the public a glimpse of what living and working in space is like.
- He was on STS-125 on *Atlantis* in May 2009, the popular Hubble servicing mission.
- He first began tweeting during his training for the mission in April, 2009.
- He is known as @Astro_Mike on Twitter.
- About two weeks after Mike began "tweeting," more than 70,000 followers were listening.
- Soon after his launch aboard the space shuttle, he reached 200,000 followers. His number of followers nearly doubled after he sent his first tweet from space.
- While he was actually in space, rather than using the service directly while on-orbit, he wrote his messages, sent them to Mission Control, and they posted the messages through the Internet to Twitter.
- Massimino tweeted not only about carrying out specific mission activities like shaking loose a bolt during a spacewalk, but also on things like wishing on shooting stars that streaked across India below him, seeing 16 sunrises in 24 hours and eating floating chocolates.
- He recently became the first astronaut to reach one million followers on Twitter and he is still actively tweeting.
- Since Mike's experience, at least 12 other NASA astronauts have set up Twitter accounts.
- And now, we have a new first. As of January 22 of this year, we have the first official tweet directly from space.
- NASA astronaut T.J. Creamer, on board the International Space Station, became the first person to send a Twitter message directly from space, rather than sending it through mission control for posting as Mike Massimino had to do. So, that's truly incredible!

NASA's Twitter Presence - Chart 13

- Today, NASA has one of the largest and most effective uses of Twitter in the federal government, with nearly 50 different Twitter sites sharing a variety of information.
- From the famous Hubble space telescope to other important science missions such as Kepler and LCROSS, NASA continues to provide the public with regular updates on our inspiring programs and projects.
- Here are just some of NASA's twitter sites.

[@NASA](#)
[@STS124](#)
[@LADEE NASA](#)
[@NASAkepler](#)
[@NASAGLAST](#)
[@SSAtlantis](#)

[@MarsPhoenix](#)
[@STS125](#)
[@LRO NASA](#)
[@NASA_EDGE](#)
[@nasacolab](#)
[@NASA_SDO_HMI](#)
[@DESERT_RATS](#)

[@hubble](#)
[@LCROSS NASA](#)
[@TESS NASA](#)
[@NASA MAAT](#)
[@SSDiscovery](#)
[@NASA_SDO](#)

NASA Shuttle Launch Tweet-Up - Chart 14

- Last November, NASA launched a social media experience at the Kennedy Space Center in Florida that quickly turned into an unprecedented world-wide event – it was NASA's Shuttle Launch Tweet-Up.
- More than 100 Twitter users, from as far away as New Zealand, got a unique look inside America's space program and front row seats to the Nov. 16 liftoff of the space shuttle Atlantis.
- During this event, tweeters met face-to-face and shared their experiences through the quick 140-character messages.
- During the two-day event, the tweeters took behind-the-scenes tours of Kennedy, spoke at length with NASA astronauts, technicians, engineers and managers, and saw a launch from the vantage point usually reserved for more traditional media.
- The more than 100 people in attendance had over 150,000 followers. NASA Television also streamed video of Tweet-Up events online where more than 7,500 viewers watched the events prior to launch.
- The Tweet-Up was the third highest trending topic Nov. 15 on the Twitter social networking service.

Ensuring Social Media Success - Chart 15

- So, I've shared with you some specific examples of how we've used social media to make space and what we do more accessible to the public.
- Finally, today, I want to share with you some of the things we've found to be true in order to ensure the success of our social media efforts.
- For social media to be successful there are still some basic communication tenants that are important:
- **You still have to write well and creatively – tools don't replace creative writers.**
 - Ideally, social media for the general public should be well-written, engaging and avoid technical jargon.
 - Having only 140 characters forces you to be both creative and direct. If you want the information to resonate you have to really think about what you write.
- **You have to have a compelling story so that people are willing to listen.**
 - You continually need to share things that are new, innovative, and interesting.
 - Your posts should always provide fresh information or a fresh viewpoint, rather than being used as just another distribution tool to duplicate press releases, for example.
- **The credibility of the owner of the social media blog or message – whether an individual or a group – is critical.**
 - Followers quickly become indifferent or even hostile to a person or group that appears to be dishonest, evasive, poorly informed, or acting as a mouthpiece for the “party line.”
 - There's a reason people are interested in following Neil DeGrasse Tyson, for example, and not other astrophysicists. He's engaging, he's interesting, and he's sincere.
- **We've also found that to build credibility in social media channels takes a commitment of time and effort.**
 - You must be willing to update the blogs, the Facebook page, the Twitter stream, the Flickr account, etc., on a regular basis.
- **Equally important is a commitment to interact with the followers and talk WITH them, not just AT them.**

- This is achieved by encouraging users to comment on postings, reading their comments, replying to them, and commenting on THEIR social media channels, when appropriate.
 - Engaging the users transforms them from simply a viewing audience to active “co-builders” of your social media presence.
 - In turn, this usually leads to positive feedback for your social media efforts.
 - In some ways, it’s the homeowner/renter phenomena. People tend to care most strongly about the things they actually own -- and engaged social media users develop a “vested interest” in your channels.
 - You have to give the writer of the blog some freedom to interact, so trust and empowerment is a must. You can’t have multiple bureaucratic reviews for every tweet, for example.
- **Finally, it’s important to ensure accessibility to your social media vehicles, just as you would more traditional communication channels.**
 - In January 2009, nasa.gov capitalized on the agency's growing social media efforts by rolling out a new "Connect and Collaborate with NASA" page, at www.nasa.gov/connect.
 - This provides the public with quick connections to the agency's pages on Twitter, Facebook, UStream, YouTube, Flickr and MySpace, as well as NASA podcasts and vodcasts on iTunes.
 - The page also provides links to agency chats, Tweet-Up events, RSS feeds and the agency's official blog – providing all the options for collaborating with NASA through social media in one central location.
 - So, these are some of the guidelines that we’ve determined are critical to our efforts. When we have broken away from these key tenants, we haven’t seen the same success.

Close - Chart 16

- I hope you’ve enjoyed hearing today some of the ways we’ve used social media at NASA to engage and inspire the public.

- I think that Bob Jacobs, deputy assistant administrator for Public Affairs at NASA expressed the benefit of social media well.
- He said social media is about "cleaning off the windows" and giving people a better view of their space program.
- So, we'll continue to do just that and use these tools to ensure "there's enough space for everyone."
- Now, I'll take your questions.